

# **Module E:**

# **Postpartum Nutrition**

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## Overview

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### Introduction

This module provides information for breastfeeding and non-breastfeeding postpartum women.

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### Learning Objectives

After completing this module the Nutrition Assistant will be able to:

- describe the general nutritional needs of postpartum women,
  - describe common postpartum problems and identify solutions to these problems,
  - identify indicators of nutritional need and specify conditions for a postpartum woman's WIC eligibility,
  - discuss family planning methods,
  - in a case study situation, assess a postpartum woman's anthropometric, biochemical, clinical, and dietary status, and
  - in a role-play situation, interview and provide individual education to a postpartum woman.
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*\* Words that you may not know are **underlined**. Definitions for these words can be found in the **Glossary** at the end of the module. (Note: Words are only underlined the first few times they appear in the text.)*

## After the Birth

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### Definition of Postpartum

Postpartum is the period of time after birth.

Postpartum women are women who have recently given birth.

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### Postpartum Period May Be Stressful

For the new mother, the postpartum period may be quite stressful. This may be due to:

- the physical stress of pregnancy and delivery;
- the large amount of work to do with little time for rest or sleep; and
- the need of other family members for attention while the new baby becomes the focus of attention.

Because of the stress the new mother may forget about her own health and nutrition.

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### Needs of the New Mother

The postpartum period is a time of dramatic emotional and physical change for the new mother.

Whether breastfeeding or bottle feeding, the new mother should be encouraged to take good care of herself. She will need to:

- replace the nutrients lost during pregnancy and delivery,
  - return to a healthy weight,
  - eat a healthy diet,
  - see her doctor for the postpartum medical visit, and
  - consider family planning.
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## After the Birth (continued)

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### **Learning Activity 1**

To learn more about what a new mother may experience you may want to try **Learning Activity 1**.

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## Nutritional Needs of Postpartum Women

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### **Importance of Postpartum Woman's Diet**

The postpartum woman needs to eat a nutritious diet:

- to replace the nutrients she lost during pregnancy,
  - for energy, and
  - to maintain her body.
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### **Nutrition Recommendations**

The chart on the next page lists general nutrition recommendations for postpartum women.

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## Nutritional Needs of Postpartum Women (continued)

### General Nutrition Recommendations for Postpartum Women

- Eat a wide variety of foods with high nutrient density.
- Eat the recommended servings from each food group using the *Food Guide Pyramid* as a guide for family meal selection and preparation.
- Use foods and recipes that require little or no preparation (avoid high-fat fast foods).
- Take in plenty of fluids such as water, juice, and soups.
- Avoid:
  - fad weight reduction diets,
  - harmful substances (such as alcohol, tobacco and drugs), and
  - excessive intake of fat, salt, caffeine, sugar, and artificial sweeteners.

## Nutritional Needs of Postpartum Women (continued)

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<b>Recommended Diet</b>	A postpartum woman's diet should replace nutrients lost during pregnancy and include nutrients needed to maintain her body.
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<b>Recommended Food Group Servings</b>	Use the <i>Food Guide Pyramid</i> and the <i>Food Group Servings for Postpartum Women</i> chart on the following pages to guide you when talking with a postpartum participant.
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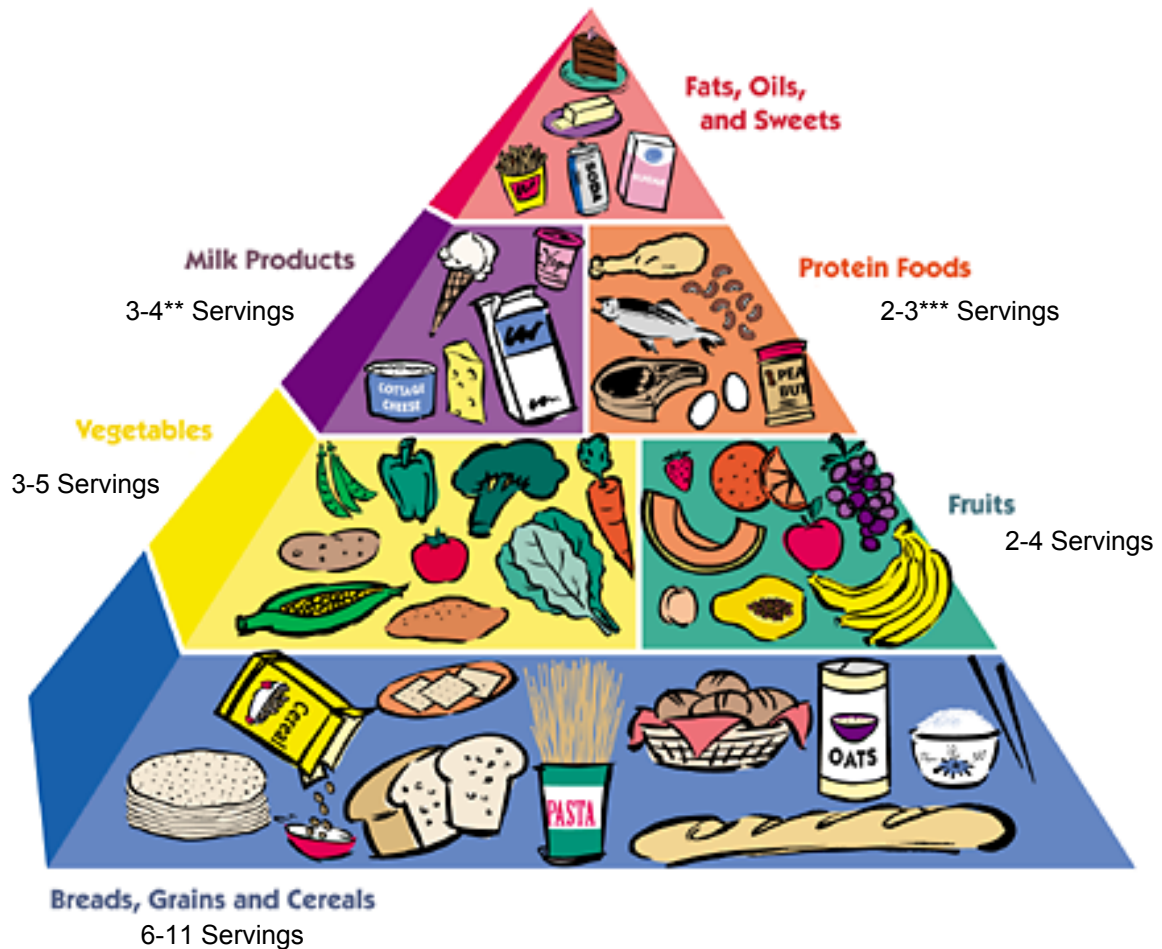
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## Nutritional Needs of Postpartum Women (continued)

### Food Guide Pyramid- Postpartum Women



\*\* 4 servings milk products for women less than 24 years old

\*\*\* 3 servings protein foods for breastfeeding women

## Nutritional Needs of Postpartum Women (continued)

### Food Group Servings for Postpartum Women

Food Group	Servings	Foods
Breads, Cereals & Grains	6-11	Bread, tortilla, crackers, roll, bun, bagel, muffin, biscuit, pancake, cooked rice, noodles, macaroni, spaghetti, cold cereal, hot cereal
Vegetables	3-5	<p><u>Vitamin A-Rich Vegetables:</u> Carrot, greens, tomato, spinach, winter squash, sweet potato, bok choy, red bell pepper, red chili pepper</p> <p><u>Vitamin C-Rich Vegetables:</u> Broccoli, tomato, cabbage, cauliflower, bell pepper, chili pepper</p> <p><u>Other Vegetables:</u> Potato, peas, green beans, corn, lettuce, summer squash, zucchini, asparagus</p>
Fruits	2-4	<p><u>Vitamin A-Rich Fruits:</u> Cantaloupe, apricot, mango, papaya</p> <p><u>Vitamin C-Rich Fruits:</u> Orange, lemon, tangerine, cantaloupe, strawberry, kiwi, grapefruit, mango, papaya, orange juice, grapefruit juice, juices with Vitamin C added</p> <p><u>Other Fruits:</u> Apple, banana, grapes, peach, nectarine, raisins, pear, watermelon, pineapple</p>

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## Nutritional Needs of Postpartum Women (continued)

### Food Group Servings for Postpartum Women

Food Group	Servings	Foods
Milk Products	3-4**	Milk, yogurt, cheese, cottage cheese  <i>Eat mostly non-fat or low-fat milk products.</i>
Protein Foods	2-3***	<u>Vegetable Protein:</u> Cooked dry beans or peas, peanut butter, nuts, seeds, soy products (such as tofu)  <u>Animal Protein:</u> Chicken, turkey, fish, beef, pork, eggs

\*\* 4 servings for young women less than 24 years old

\*\*\* 3 servings for breastfeeding women

## Nutritional Needs of Postpartum Women (continued)

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### Needs May Vary

The number of servings from each of the food groups recommended for a postpartum woman may differ slightly depending on the postpartum woman's needs. The number of servings will depend on the woman's:

- age,
- body size,
- activity level (calories),
- weight before pregnancy,
- weight gained during pregnancy, and
- breastfeeding status.

For example, a tall, breastfeeding teen who was underweight before she became pregnant and who gained only 18 pounds during her pregnancy will need more servings from the food groups than an overweight short adult woman who gained 35 pounds during pregnancy.

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### Needs of Teens & Young Adults

Postpartum teens and young adults to age 24 have slightly greater nutritional needs than women over 24 years have.

Women under 24 years should have **4 servings** of foods from the Milk Products group to get the calcium needed for bone growth.

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### Needs of Breastfeeding Women

Breastfeeding women, when compared to non-breastfeeding women, usually need:

- more calories and
  - more servings from the Protein Foods group.
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## Nutritional Needs of Postpartum Women (continued)

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### Needs of Breastfeeding Women (continued)

A breastfeeding woman needs about the same number of calories in her diet as she did while pregnant. Her caloric needs will be greatest during the first six months (if the baby is not receiving large amounts of supplemental foods and formula).

A breastfeeding mother should also take in at least **3 servings** of foods from the Protein Foods group.

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### Needs of Women Recovering from C- Sections

Postpartum women who are recovering from Cesarean sections need nutrients for healing. They need to take in enough:

- Vitamin C and
  - protein.
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### Women with Special Needs

Postpartum women who have special needs, such as diabetes, hypertension, or cancer, should be referred to the Registered Dietitian.

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## Common Problems

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### Problems & Concerns

There are several common problems and concerns that postpartum women experience. These are:

- anemia,
- constipation,
- depression,
- discomfort,
- fatigue,
- getting in shape, and
- hemorrhoids.

Become familiar with these problems so that you can help postpartum identify solutions.

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### Chart of Problems & Solutions

The chart on the next few pages lists these problems and some possible solutions.

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### Learning Activity 2

To learn more about postpartum problems you may want to try **Learning Activity 2**.

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## Common Problems (continued)

### Common Problems & Solutions

Problem	Solution(s)
<p><b>Anemia</b> (low iron levels in the blood)  Hgb <math>\leq</math> 11.9 g/dl or  Hct <math>\leq</math> 35.6 %</p> <p>Anemia is commonly due to:</p> <ul style="list-style-type: none"> <li>• low iron stores,</li> <li>• multiple fetuses,</li> <li>• demands of pregnancy, and</li> <li>• blood loss at and after delivery (as in C-sections).</li> </ul>	<div data-bbox="803 562 1377 667" style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p><b><i>Refer to Registered Dietitian if Hgb &lt;10g/dl or Hct &lt;30%.</i></b></p> </div> <ul style="list-style-type: none"> <li>• Eat iron-rich foods (such as beans and iron-fortified cereals) along with Vitamin C-rich foods (such as orange juice, tomatoes, and broccoli). Vitamin C helps the body with iron absorption.</li> <li>• Cook foods in cast-iron cookware.</li> <li>• Continue to take prenatal vitamins or iron supplements with doctor approval.</li> <li>• Decrease intake of coffee and tea (they interfere with iron absorption).</li> </ul>

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## Common Problems (continued)

### Common Problems & Solutions (continued)

Problem	Solution(s)
<p><b>Constipation</b> (less often than usual or difficult bowel movements) may be due to:</p> <ul style="list-style-type: none"> <li>• Stress on stomach and intestines during delivery and/or</li> <li>• inappropriate diet.</li> </ul>	<div data-bbox="630 552 1279 695" style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p><b><i>Recommend participant see her doctor if situation lasts for more than a week.</i></b></p> </div> <ul style="list-style-type: none"> <li>• Drink:             <ul style="list-style-type: none"> <li>➤ plenty of fluids to help keep the stool soft,</li> <li>➤ small amounts of prune juice, and/or</li> <li>➤ hot or very cold liquids to bring on a bowel movement.</li> </ul> </li> <li>• Eat high-fiber foods (such as bran cereals, whole-grains, dried fruits, fresh fruits and vegetables).</li> <li>• Do mild exercise (such as walking) each day.</li> <li>• Do not force bowel movements.</li> <li>• Do NOT use:             <ul style="list-style-type: none"> <li>➤ laxatives unless advised by a doctor or</li> <li>➤ mineral oil (it interferes with absorption of fat-soluble vitamins).</li> </ul> </li> </ul>

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## Common Problems (continued)

### Common Problems & Solutions (continued)

Problem	Solution(s)
<p><b>Depression</b> (<u>postpartum depression</u> or “baby blues”) are feelings of sadness after delivery that may last for about 4 months</p>	<div data-bbox="706 562 1393 772" style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p><b><i>Refer participant to her doctor if she appears severely depressed, cries constantly, has a blank stare, or seems unable to cope and follow up at next visit.</i></b></p> </div> <ul style="list-style-type: none"> <li>• Be aware that postpartum depression:               <ul style="list-style-type: none"> <li>➤ is very common (2/3 of all new mothers experience it), and</li> <li>➤ may be caused by changes in hormone levels.</li> </ul> </li> <li>• Talk about concerns with others for emotional support and understanding</li> <li>• Participate in a new mothers support group.</li> <li>• Do something special for self.</li> </ul>
<p><b>Discomfort</b> (such as breast soreness and aches and pains from delivery)</p>	<div data-bbox="706 1381 1393 1476" style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p><b><i>If woman is breastfeeding, refer her to a lactation specialist.</i></b></p> </div> <ul style="list-style-type: none"> <li>• Be aware that discomfort is common among new mothers.</li> <li>• Get plenty of rest.</li> </ul>

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## Common Problems (continued)

### Common Problems & Solutions (continued)

Problem	Solution(s)
<p><b>Fatigue</b> is probably the most common complaint for postpartum women. Fatigue is usually due to:</p> <ul style="list-style-type: none"> <li>• lack of sleep and</li> <li>• trying to “do it all”.</li> </ul>	<ul style="list-style-type: none"> <li>• Rest whenever possible (“nap when the baby naps” is especially helpful advice).</li> <li>• Go to bed early at night to make up for sleep lost during night feedings.</li> <li>• Ask family members to help out with household chores and meals.</li> <li>• Keep housework simple (do only what is needed).</li> </ul>
<p><b>Getting in Shape</b></p> <p><i>Women often want to lose the extra weight gained during pregnancy right away.</i></p>	<ul style="list-style-type: none"> <li>• Eat a nutritious diet.</li> <li>• Exercise regularly.</li> <li>• Do NOT:             <ul style="list-style-type: none"> <li>➢ diet during the first few weeks,</li> <li>➢ fast to lose weight, and/or</li> <li>➢ use fad diets.</li> </ul> </li> <li>• To lose weight:             <ul style="list-style-type: none"> <li>➢ lose 1 to 2 lbs/week and</li> <li>➢ lose the last 5 to 10 lbs gradually over several months.</li> </ul> </li> </ul>

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## Common Problems (continued)

### Common Problems & Solutions (continued)

Problem	Solution(s)
Hemorrhoids	<div><p><b><i>A participant should NOT use medications unless advised by a doctor.</i></b></p><ul style="list-style-type: none"><li>• Sit in a warm bath for 15-20 minutes.</li><li>• Apply Witch Hazel with cotton balls. (Refrigerated Witch Hazel may be more soothing since it is cold.)</li><li>• Apply an ice pack to area.</li><li>• Use recommendations for treating constipation. (Since straining due to constipation often causes hemorrhoids.)</li></ul></div>

## Indicators of Nutritional Need

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### **Charts of Indicators of Nutritional Need**

The 4 charts on the next pages list and describe for postpartum women:

- indicators of nutritional need (anthropometric, biochemical, clinical, and dietary),
  - corresponding ISIS codes, and
  - corresponding levels of nutrition intervention.
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### **Learning Activity 3, 4, or 5**

To learn more about how to provide nutrition education to a postpartum woman you may want to try **Learning Activity 3, Learning Activity 4, or Learning Activity 5** found at the end of this module.

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## Indicators of Nutritional Need (continued)

### Anthropometric Indicators

Indicator	Description	ISIS Code	Level	
			BF	Non-BF
<b>Underweight</b>	Current BMI <19.8	A10	3	2
<b>Overweight</b>	Current BMI between 26.1 and 29.0	A20	2	2
<b>Very Overweight</b>	Current BMI >29.0	A21	2	2
<b>High Maternal Weight Gain Total</b>	For most recent pregnancy, total weight gained was: <ul style="list-style-type: none"> <li>• &gt;40 lbs. for underweight</li> <li>• &gt;35 lbs. for normal weight</li> <li>• &gt;25 for overweight</li> <li>• &gt;15 lbs. for obese</li> </ul>	A46	1	1

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## Indicators of Nutritional Need (continued)

### Biochemical Indicators

Indicator	Description	ISIS Code	Level	
			BF	Non-BF
<b>Low Hemoglobin/Hematocrit</b>	In early postpartum: <ul style="list-style-type: none"> <li>• Hemoglobin level (Hgb) from 10-11.9 g/dl or</li> <li>• Hematocrit level (Hct) from 30.0-35.6 %</li> </ul>	B12	2	2
<b>Very Low Hemoglobin/Hematocrit</b>	<ul style="list-style-type: none"> <li>• Hemoglobin level (Hgb) &lt;10.0 g/dl or</li> <li>• Hematocrit level (Hct) &lt;30.0 %</li> </ul>	B13	3	3
<b>Other Congenital Blood Disorders</b>	<ul style="list-style-type: none"> <li>• Hereditary conditions that cause physical or metabolic abnormality</li> <li>• Condition must alter nutritional status metabolically and/or mechanically</li> <li>• Examples include sickle cell anemia and thalassemia major</li> </ul>	B90	4	4
<b>Lead Poisoning</b>	Blood lead level $\geq$ 10 mcg/dl within past 12 months	B92	4	4

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## Indicators of Nutritional Need (continued)

### Clinical Indicators

Indicator	Description	ISIS Code	Level	
			BF	Non-BF
<b>Gestational Diabetes Mellitus</b>	Gestational diabetes for most recent pregnancy	C11	3	3
<b>Preterm Delivery</b>	Most recent delivery $\leq 37$ weeks	C20	2	2
<b>Low Birthweight</b>	Birth weight of most recent newborn is $\leq 2500$ g or 5 lbs, 8 oz.	C21	2	2
<b>Fetal Death</b>	Fetal death $\geq 20$ weeks gestation for most recent pregnancy	C30	2	2
<b>Neonatal Death</b>	Newborn death $\leq 28$ days after birth for most recent pregnancy	C31	2	2
<b>Spontaneous Abortion, Fetal or Neonatal Loss</b>	<ul style="list-style-type: none"> <li>Spontaneous termination at <math>&lt; 20</math> weeks or <math>&lt; 500</math> grams or</li> <li>Fetal or neonatal death</li> </ul>	C33	NA	2
<b>Closely Spaced Pregnancy</b>	Conception before 16 months postpartum for most recent pregnancy	C44	1	1
<b>Multi-fetal Gestation</b>	Most recent pregnancy resulted in twins, triplets or more.	C45	3	2

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## Indicators of Nutritional Need (continued)

### Clinical Indicators (continued)

Indicator	Description	ISIS Code	Level	
			BF	Non-BF
<b>Large for Gestational Age Infant</b>	Birth weight of most recent newborn is: <ul style="list-style-type: none"> <li>• ≥9 lbs (or 4,000 gms) or</li> <li>• ≥90<sup>th</sup> percentile weight for gestational age at birth</li> </ul>	C47	1	1
<b>Birth with Nutrition-Related Congenital or Birth Defect</b>	Most recent pregnancy resulting in congenital or birth defect related to inappropriate nutritional intake such as inadequate intake of zinc or folic acid or excess of Vitamin A	C48	3	3
<b>Diabetes Mellitus</b>	Diabetes Mellitus Type I or II	C50	4	4
<b>Chronic Hypertension</b>	Current high blood pressure	C51	4	4
<b>Active TB</b>	Tuberculosis within the past 6 months	C52	4	4
<b>Renal (Kidney) Disease</b>	Current kidney disease, including, but not limited to: <ul style="list-style-type: none"> <li>• pyelonephritis</li> <li>• persistent proteinuria</li> </ul>	C53	4	4
<b>Cardio-Pulmonary Disease</b>	Current cardiopulmonary disease severe enough that it affects nutritional status	C55	4	4

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## Indicators of Nutritional Need (continued)

### Clinical Indicators (continued)

Indicator	Description	ISIS Code	Level	
			BF	Non-BF
<b>Gastrointestinal Disorders</b>	Current disease or condition that interferes with intake or absorption of nutrients, including, but not limited to: <ul style="list-style-type: none"> <li>• stomach or intestinal ulcers</li> <li>• small bowel enterocolitis and syndrome</li> <li>• inflammatory bowel disease (such as ulcerative colitis or Crohn's disease)</li> <li>• liver disease</li> <li>• pancreatitis</li> <li>• gall bladder disease</li> <li>• inflammatory conditions of the small intestine due to ingestion of wheat products (such as Celiac Sprue, gluten enteropathy, Non-tropical Sprue)</li> </ul>	C56	4	4
<b>Thyroid Disorder</b>	Current hyperthyroid or hypothyroid conditions	C57	4	4
<b>Cancer</b>	Current cancer for which treatment or condition affects nutritional status	C58	4	4

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## Indicators of Nutritional Need (continued)

### Clinical Indicators (continued)

Indicator	Description	ISIS Code	Level	
			BF	Non-BF
<b>Central Nervous System (CNS) Disorders</b>	Current CNS disorders (such as epilepsy, cerebral palsy, neural tube defects, Parkinson's disease, and multiple sclerosis) that: <ul style="list-style-type: none"> <li>• affect energy requirements and ability to feed self,</li> <li>• alter nutritional status</li> </ul>	C59	4	4
<b>Smoking 1</b>	Smoking 1-7 cigarettes/day	C60	2	NA
<b>Drugs</b>	Use of any illegal drugs	C62	4	4
<b>Smoking 2</b>	Smoking 7-14 cigarettes/day	C63	2	NA
<b>Smoking 3</b>	Smoking 15-20 cigarettes/day	C64	2	NA
<b>Smoking 4</b>	Smoking ≥21 cigarettes/day	C65	2	NA
<b>C-Section</b>	Cesarean section for most recent pregnancy	C72	1	1

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## Indicators of Nutritional Need (continued)

### Clinical Indicators (continued)

Indicator	Description	ISIS Code	Level	
			BF	Non-BF
<b>Severe Acute Infections</b>	Infections within last 6 months that affect nutritional status, including, but not limited to: <ul style="list-style-type: none"> <li>• pneumonia</li> <li>• meningitis</li> <li>• parasitic infection</li> <li>• bronchitis (3 episodes in 6 months)</li> <li>• rubella</li> <li>• listeriosis</li> </ul>	C80	3	3
<b>Immuno-Deficiency or Chronic Infections</b>	Immunodeficiency or chronic infections that affect nutritional status such as: <ul style="list-style-type: none"> <li>• hepatitis</li> <li>• human immunodeficiency virus (HIV) infection</li> <li>• Acquired Immune Deficiency Syndrome (AIDS)</li> </ul>	C82	4	4

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## Indicators of Nutritional Need (continued)

### Clinical Indicators (continued)

Indicator	Description	ISIS Code	Level	
			BF	Non-BF
<b>Inborn Errors of Metabolism</b>	Gene mutations or gene deletions that alter metabolism, including, but not limited to: <ul style="list-style-type: none"> <li>• phenylketonuria (PKU)</li> <li>• maple syrup urine disease</li> <li>• galactosemia</li> <li>• hyperlipoproteinemia</li> <li>• homocystinuria</li> <li>• tyrosinemia</li> <li>• histidinemia</li> <li>• urea cycle disorders</li> <li>• glutaric aciduria</li> <li>• methylmalonic acidemia</li> <li>• glycogen storage disease</li> <li>• galactokinase deficiency</li> <li>• fructoaldolase deficiency</li> <li>• propionic acidemia</li> <li>• hypermethionemia</li> </ul>	C86	4	4
<b>Developmental Sensory, or Motor Delays</b>	Developmental, sensory, or motor delays (such as delays due to head trauma, brain damage, birth injury) that: <ul style="list-style-type: none"> <li>• interfere with ability to eat</li> <li>• restrict ability to chew or swallow</li> <li>• require tube feeding</li> </ul>	C90	4	4

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## Indicators of Nutritional Need (continued)

### Clinical Indicators (continued)

Indicator	Description	ISIS Code	Level	
			BF	Non-BF
<b>Homeless</b>	Woman lacks a fixed, regular nighttime residence; or has residence in a shelter, institution for temporary residence, the residence of another individual used for temporary accommodation or a place not designed or usually used for accommodating people.	C91	2	2
<b>Recipient of Abuse</b>	Within the past 6 months, has been abused emotionally, physically, or sexually.	C93	2	2
<b>Eating Disorder</b>	Condition in which woman has distorted sense of body image and fear of becoming fat. Symptoms may include: <ul style="list-style-type: none"> <li>• self-induced vomiting</li> <li>• abuse of laxatives and enemas</li> <li>• periods of starvation</li> <li>• use of appetite suppressants or diuretics</li> <li>• self-induced, marked weight loss</li> </ul>	C96	4	4
<b>Migrant</b>	Member of a family where within the past 24 months, at least 1 individual has worked in agriculture on a seasonal basis and has a temporary home for this work.	C98	1	1

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## Indicators of Nutritional Need (continued)

### Clinical Indicators (continued)

Indicator	Description	ISIS Code	Level	
			BF	Non-BF
<b>Entering Foster Care*</b>  <i>*Use only as a risk if no other risks can be identified</i>	Within past 6 months: <ul style="list-style-type: none"> <li>entered foster care or</li> <li>moved from one foster care home to another</li> </ul>	C99	2	2
<b>Nutrient Deficiency Diseases</b>	Diagnosis of a nutritional deficiency or disease caused by insufficient dietary intake of nutrients such as: <ul style="list-style-type: none"> <li>protein energy malnutrition (PEM)</li> <li>scurvy</li> <li>rickets</li> <li>beri beri</li> <li>hypocalcemia</li> <li>osteomalacia</li> <li>vitamin K deficiency</li> <li>pellagra</li> <li>cheilosis</li> <li>Menkes disease</li> <li>xerophthalmia</li> </ul>	C100	4	4
<b>Young Teenager</b>	Age is ≤15 years at conception of most recent pregnancy	C101	2	2
<b>Teenager</b>	Age is 16-17 years at conception of most recent pregnancy	C102	1	1

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## Indicators of Nutritional Need (continued)

### Clinical Indicators (continued)

Indicator	Description	ISIS Code	Level	
			BF	Non-BF
<b>High Parity &amp; Young Age</b>	Under age 20 at conception of most recent pregnancy and 3 or more previous pregnancies (≥20 weeks gestation)	C103	2	2
<b>Hypoglycemia</b>	Low blood sugar level	C104	4	4
<b>Other Medical Diseases &amp; Conditions</b>	Medical diseases or conditions and their treatments that affect nutritional status, including, but not limited to: <ul style="list-style-type: none"> <li>• juvenile rheumatoid arthritis</li> <li>• lupus erythematosus</li> <li>• cystic fibrosis</li> </ul>	C105	4	4
<b>Genetic &amp; Congenital Disorders</b>	Genetic and congenital disorders that affect nutritional status, metabolically or mechanically, including but not limited to: <ul style="list-style-type: none"> <li>• Down's syndrome</li> <li>• cleft lip or palate</li> <li>• muscular dystrophy.</li> </ul>	C106	4	4
<b>Drug Nutrient Interactions</b>	Use of medications that interfere with nutrient intake or utilization such that nutritional status is affected	C107	4	4

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## Indicators of Nutritional Need (continued)

### Clinical Indicators (continued)

Indicator	Description	ISIS Code	Level	
			BF	Non-BF
<b>Inadequate Vitamin/Mineral Supplementation</b>	Not routinely taking recommended dietary supplementation	C108	2	2
<b>Inappropriate/ Excessive Intake of Supplements</b>	Inappropriate or excessive intake of unprescribed vitamins, minerals, and/or herbal remedies	C109	3	3
<b>Food Allergies</b>	Reaction to a food that causes an adverse immunologic response or hypersensitivity	C110	4	4
<b>Lactose Intolerance</b>	Insufficient production of the enzyme lactase causing inability to digest lactose	C111	2	2
<b>Major Surgery, Trauma, Burns</b>	Recent major surgery, trauma, burns: <ul style="list-style-type: none"> <li>• within past 2 months that affect nutritional status or</li> <li>• &gt; 2 months if doctor diagnoses need for continued nutritional support</li> </ul>	C112	3	3
<b>Depression</b>	Diagnosed by a physician as having depression	C113	3	3

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## Indicators of Nutritional Need (continued)

### Clinical Indicators (continued)

Indicator	Description	ISIS Code	Level	
			BF	Non-BF
<b>Severe Dental Problems</b>	Dental problems so severe that they affect the ability to ingest adequate quantity or quality of foods, including, but not limited to: <ul style="list-style-type: none"> <li>tooth decay</li> <li>periodontal disease</li> <li>tooth loss</li> <li>ineffectively replaced teeth</li> <li>gingivitis</li> </ul>	C114	2	2
<b>Alcohol Use</b>	<ul style="list-style-type: none"> <li>Current routine drinking of 2 or more alcoholic drinks/day,</li> <li>Current binge drinking of 5 or more alcoholic drinks on the same occasion in the past 30 days, or</li> <li>Current heavy drinking of 5 or more alcoholic drinks on 5 or more days in the past 30 days.</li> </ul>	C115	2	2
<b>Pica</b>	Current or recent craving for, or ingestion of non-food, non-ice items such as: <ul style="list-style-type: none"> <li>clay</li> <li>laundry or corn starch</li> <li>dirt</li> <li>ashes</li> <li>paint chips</li> <li>baking soda</li> </ul>	C117	4	4

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## Indicators of Nutritional Need (continued)

### Clinical Indicators (continued)

Indicator	Description	ISIS Code	Level	
			BF	Non-BF
<b>Pica: Ice</b>	Eating large quantities of ice	C118	2	2
<b>Limited Ability to Make Feeding Decisions and/or Prepare Food</b>	Limited ability to make feeding decisions and/or prepare food, including individuals who are: <ul style="list-style-type: none"> <li>• ≤17 years old</li> <li>• mentally disabled/delayed, including clinically depressed</li> <li>• physically disabled to a degree that restricts or limits food preparation abilities</li> <li>• currently using or have history of abusing alcohol/drugs</li> </ul>	C121	3	3
<b>Persistent Asthma</b>	Persistent asthma requiring daily medications and severe enough to affect nutritional status	C122	3	3
<b>Cracked &amp; Bleeding Nipples</b>	Having cracked and bleeding nipples	C201	3	NA
<b>Persistent Sore Nipples</b>	Having persistent sore nipples	C202	3	NA
<b>Mastitis</b>	Having breast infection	C203	4	NA
<b>Flat or Inverted Nipples</b>	Having flat or inverted nipples	C204	3	NA

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## Indicators of Nutritional Need (continued)

### Clinical Indicators (continued)

Indicator	Description	ISIS Code	Level	
			BF	Non-BF
<b>Recurrent Plugged Ducts</b>	Having recurrent plugged ducts	C205	3	NA
<b>Failure of Milk to Come In</b>	Failure of milk to come in by 4 days postpartum	C206	3	NA
<b>Severe Breast Engorgement</b>	Severe breast engorgement	C208	3	NA
<b>Tandem Nursing</b>	Nursing an infant and toddler at the same time	C209	2	NA
<b>Breastfeeding Woman ≥40 Years Old</b>	Mother ≥40 years old	C210	2	NA

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## Indicators of Nutritional Need (continued)

### Dietary Indicators

Indicator	Description	ISIS Code	Level	
			BF	Non-BF
<b>Low Intake</b>	Typical daily intake of less than the minimum number of servings from 1 or more of the food groups	D10	1	1
<b>Low Vitamin A</b>	Typical daily intake of less than 1 serving of Vitamin A-rich foods	D11	1	1
<b>Low Vitamin C</b>	Typical daily intake of less than 1 serving of Vitamin C-rich foods	D12	1	1
<b>Low Fruits/ Vegetables</b>	Typical daily intake of less than the minimum number of servings	D13	1	1
<b>Low Breads/Grains/ Cereals</b>	Typical daily intake of less than the minimum number of servings	D14	1	1
<b>Low Milk</b>	Typical daily intake of less than the minimum number of servings	D15	1	1
<b>Low Protein</b>	Typical daily intake of less than the minimum number of servings	D16	1	1
<b>Low Fluid</b>	Low fluid intake	D18	1	1
<b>Low Fiber</b>	Low fiber intake	D19	1	1

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## Indicators of Nutritional Need (continued)

### Dietary Indicators

Indicator	Description	ISIS Code	Level	
			BF	Non-BF
<b>Low Iron</b>	Low iron intake	D20	1	1
<b>High Sugar Intake</b>	High sugar intake	D90	1	1
<b>High Fat Intake</b>	High fat intake	D91	1	1
<b>High Sodium/Salt Intake</b>	High sodium/salt intake	D92	1	1
<b>Excessive Caffeine Intake</b>	Intake of 3 or more cups of coffee (or other such caffeinated drinks) per day	D93	2	NA
<b>Vegan Diets or Highly Restrictive Diets</b>	Consuming a diet: <ul style="list-style-type: none"> <li>• of plant origin-foods only (eating no animal products or foods made with animal ingredients)</li> <li>• low in calories, limited in nutrients, or involve high-risk eating patterns</li> </ul>	D100	4	4

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## Indicators of Nutritional Need (continued)

### Other Indicators

Indicator	Description	ISIS Code	Level	
			BF	Non-BF
<b>Possibility of Regression: Amthropometric</b>	Possibility of regression for: <ul style="list-style-type: none"> <li>• A10-underweight</li> <li>• A20-overweight</li> <li>• A21-very overweight</li> </ul>	N10	1	1
<b>Possibility of Regression: Biochemical</b>	Possibility of regression for: <ul style="list-style-type: none"> <li>• B12-low hemoglobin</li> <li>• B13-very low hemoglobin</li> <li>• B92-lead poisoning</li> </ul>	N11	1	1
<b>Possibility of Regression: Clinical</b>	Possibility of regression for: <ul style="list-style-type: none"> <li>• C80-severe acute infections</li> <li>• C96-eating disorder</li> <li>• C100-nutrient deficiency diseases</li> <li>• C108-inadequate vitamin/mineral supplementation</li> <li>• C110-food allergies</li> <li>• C117 and C118-pica</li> <li>• C121-limited ability to make feeding decisions and/or prepare food</li> <li>• C201-cracked and bleeding nipples</li> <li>• C202-persistent sore nipples</li> <li>• C203-mastitis</li> </ul>	N12	1	1

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## Indicators of Nutritional Need (continued)

### Other Indicators (continued)

Indicator	Description	ISIS Code	Level	
			BF	Non-BF
<b>Possibility of Regression: Dietary</b>	Possibility of regression for: <ul style="list-style-type: none"> <li>• D10-low intake</li> <li>• D11-low Vitamin A</li> <li>• D12-low Vitamin C</li> <li>• D13-low fruits/vegetables</li> <li>• D14-low breads/grains/cereals</li> <li>• D15-low milk</li> <li>• D16-low protein</li> <li>• D17-low fluid</li> <li>• D19-low fiber</li> <li>• D20-low iron</li> <li>• D90-high sugar intake</li> <li>• D91-high fat intake</li> <li>• D92-high sodium/salt</li> <li>• D93-excessive caffeine intake</li> </ul>	N13	1	1
<b>Breastfeeding a WIC Infant at Nutritional Risk</b>	Breastfeeding a WIC infant at nutritional risk	N32	1	NA

## Family Planning

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### Definition

Family planning is planning:

- how many children to have and
  - when to have children.
- 

### Spacing Pregnancies

WIC recommends that a woman wait a year or more before getting pregnant again. This time allows:

- each child to spend time with her/his mother,
- the family to save some money (since diapers and clothes are costly),
- the mother to replace the nutrients her body used during pregnancy (especially nutrients such as iron, folacin, Vitamins B6 and B12, and calcium), and
- the family to adjust to the new family member.

Waiting longer than a year is even better.

Pregnancies spaced **18-23 months** result in lower risk of:

- low birth weight and
  - premature deliveries.
- 

### Family Planning Methods

Family planning methods are ways to prevent pregnancy.

The method a participant chooses will depend on:

- health risks (such as protection from sexually transmitted diseases),
  - convenience of use,
  - cost,
  - effectiveness,
  - lifestyle,
  - reversibility, and
  - cultural beliefs.
- 

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## Family Planning (continued)

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### Charts

Two family planning charts are included on the next few pages. The two charts are:

- *Description, Advantages, & Disadvantages of Methods and*
- *Contraceptive Failure Rates.*

Use these two charts to guide you when you discuss family planning methods with participants.

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## Family Planning (continued)

### Description, Advantages, & Disadvantages of Methods

#### **Abstinence** (not having sexual intercourse)

##### **Advantages:**

- The most effective method of birth control **continuous abstinence is 100% effective in preventing pregnancy and sexually transmitted diseases**
- No medical or hormonal side effects
- Safe for breastfeeding and non-breastfeeding mothers

##### **Disadvantages:**

- Person(s) may be unprepared for birth control when period of abstinence has ended
- Person(s) may find it difficult to abstain for long periods of time

#### **Birth Control Pill** (prescription pill taken daily that prevents ovaries from releasing eggs)

##### **Advantages:**

- Low failure rate (3%)
- Can help prevent ovarian and fallopian tube infections
- More regular periods
- Less menstrual flow, menstrual cramping, and premenstrual cramping
- Fewer ectopic pregnancies

##### **Disadvantages:**

- Does not protect from HIV infection or other sexually transmitted diseases (STD's)
- Antibiotics and anti-seizure medications may alter its effectiveness
- Risk of blood clots, stroke, heart attack, and liver tumors
- Possible nausea and vomiting during first few cycles
- Must be taken on a regular (daily) schedule

## Family Planning (continued)

### Description, Advantages, & Disadvantages of Methods (continued)

**Cervical Cap** (soft rubber cup placed over the cervix) and **Diaphragm** (dome-shaped latex cap that must be coated with spermicide and inserted in the vagina to cover the cervix before intercourse) Cervical caps and diaphragms block the entrance to the uterus and immobilize sperm.

**Advantages:**

- Can be put in ahead of time
- Can be left in for 24-48 hours
- Safe for breastfeeding and non-breastfeeding mothers
- Can easily be carried in pocket or purse
- Generally cannot be felt by either partner
- Does not effect woman's hormones

**Disadvantages:**

- Do NOT protect from HIV infection or other STD's
- High failure rate (18%)
- May come lose during intercourse
- May be difficult to insert
- Must be inserted every time a woman has intercourse
- May require refitting
- May cause allergic reaction (to latex or spermicide)
- Diaphragm sometimes causes bladder infections

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## Family Planning (continued)

### Description, Advantages, & Disadvantages of Methods (continued)

**Depo-Provera** (A synthetic hormone, usually injected into the upper arm or buttocks, that prevents ovulation)

**Advantages:**

- Effective within 24 hours of injection
- Shot lasts for about 12 weeks
- Low failure rate (less than 1%)
- May protect against endometrial (uterine) cancer and ovarian cancer
- Convenient
- Useful for women who cannot take estrogen
- May reduce menstrual cramps

**Disadvantages:**

- Does not protect from HIV infection or other STD's
- May delay conception as long as 18 months after ending use
- May cause changes in menstrual blood flow (often fewer and lighter periods, sometimes longer and heavier periods, sometimes light spotting and breakthrough bleeding)

**Female Condom** (a polyurethane (plastic) pouch with a flexible ring at both ends---the ring at the closed end is inserted into the vagina and placed over the cervix; the ring at the open end remains outside the vagina).

**Advantages:**

- Available without prescription
- May prevent HIV infection or other STD's
- Made of polyurethane which is stronger than latex
- Safe for breastfeeding and non-breastfeeding mothers
- Once learned, insertion is easy
- Allows women to share responsibility for preventing infection
- Useful for people who are allergic to latex

**Disadvantages:**

- May tear, bunch up, or dislodge during intercourse
- May irritate penis or vagina
- High failure rate (21%)
- Expensive

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## Family Planning (continued)

### Description, Advantages, & Disadvantages of Methods (continued)

**Intrauterine Device (IUD)** (a small plastic device, that contains copper or uses a natural hormone, inserted into the uterus to prevent conception)

**Advantages:**

- Can last from 1-10 years
- Low failure rate (2%)
- Does not effect woman's hormones
- Convenient

**Disadvantages:**

- Increased risk of infection for women who have more than one sex partner or whose partner has other partners
- Does not protect from HIV infection or other STD's
- Can perforate uterus (rare occurrence)
- Can lead to iron deficiency
- May cause changes in menstrual blood flow
- May cause cramping after insertion
- Initial cost is high

**Latex Condom** (thin latex sheath worn over the penis during intercourse to prevent semen from entering the vagina)

**Advantages:**

- Available without prescription
- Latex condoms protect from HIV infection and other STD's
- Safe for breastfeeding and non-breastfeeding mothers
- No side effects except for people allergic to latex or spermicide
- Can be used with other methods

**Disadvantages:**

- May break during intercourse
- May interrupt sexual activity
- High failure rate (14%)
- May break during intercourse

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## Family Planning (continued)

### Description, Advantages, & Disadvantages of Methods (continued)

**Lunelle** (monthly injection of hormones that keeps ovaries from releasing egg, prevents sperm from joining the egg, and prevents implantation of fertilized egg)

**Advantages:**

- Low failure rate (<1%)
- Convenient

**Disadvantages:**

- Does not protect from HIV infection or other STD's
- Risk of blood clots, stroke, heart attack
- May cause changes in menstrual blood flow (irregular menstrual periods or bleeding between periods)
- May cause weight gain
- Possible nausea and vomiting during first few cycles
- Must be taken on a monthly schedule

**Mini Pill** (low-dose contraceptive pill containing progestin taken daily that prevents egg release and causes uterus opening to thicken which stops sperm from reaching the egg)

**Advantages:**

- Less risk of pelvic inflammatory disease (PID) and uterine cancer
- Safe for breastfeeding and non-breastfeeding mothers
- Safe for women who cannot take estrogen
- Low failure rate (3%)
- Fewer side effects and health risks when compared to combination birth control pills
- Light or no periods
- Less menstrual cramping

**Disadvantages:**

- Does not protect from HIV infection or other STD's
- Can cause irregular menstrual periods
- Less effective than combination birth control pills

## Family Planning (continued)

### Description, Advantages, & Disadvantages of Methods (continued)

**Natural Family Planning (Fertility Awareness Method)** (not having sexual intercourse during the fertile period of a woman's cycle)

**Advantages:**

- No side effects
- Safe for breastfeeding and non-breastfeeding mothers
- Leads to greater body awareness
- Supplies (calendars, thermometers and charts) are easy to get
- Accepted by many religious groups

**Disadvantages:**

- High failure rate (25% with typical use, better rate with perfect use)
- Does not protect from HIV infection or other STD's
- Takes time to learn and track body signs each day
- Illness or lack of sleep can cause "false" temperature signals
- Vaginal infections, use of vaginal products, or medications may alter cervical mucus

**Spermicides** (Chemicals, such as nonoxynol-9, that kill sperm, available in suppository, foam, cream, gel, film, or tablet forms)

**Advantages:**

- Available without prescription
- Can be used as a back-up method
- Safe for breastfeeding and non-breastfeeding mothers
- Easy to use

**Disadvantages:**

- May cause irritation or allergic reactions
- Can be messy
- High failure rate with typical use-26% of women become pregnant in first year with typical use (6% with perfect use)

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## Family Planning (continued)

### Description, Advantages, & Disadvantages of Methods (continued)

**Sterilization** (surgical procedure in which reproductive organs are altered to prevent reproduction)

In men, the surgery is called a vasectomy (the tubes that carry the man's sperm are cut). In women, the surgery is called tubal ligation (the tubes that carry the woman's eggs are blocked).

**Advantages:**

- The surgery is safe and recovery time is short
- No other method of birth control is ever needed
- Does not change a person's feelings or ability to have sex
- Very low failure rate (less than .5%)
- Safe for breastfeeding and non-breastfeeding mothers
- No lasting side effects

**Disadvantages:**

- Permanent (a person who has the surgery can usually not conceive children later on)
- Does not protect from HIV infection or other STD's
- May result in complications from surgical procedure
- Cost is high

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## Family Planning (continued)

### Contraceptive Failure Rates\*

Method	% Failure Rate**
<b>&lt; 1% Failure Rate</b>	
Abstinence	0
Vasectomy (Male Sterilization)	.15
Depo-Provera	.30
Tubal Ligation (Female Sterilization)	.50
Intrauterine Device (IUD), with copper	.80
<b>2-5% Failure Rate</b>	
Intrauterine Device (IUD), with hormones	2
Mini Pill	3
Birth Control Pill	5
<b>&gt;10% Failure Rate</b>	
Latex Condom	14
Diaphragm	20
Cervical Cap***	20
Female Condom	21
Natural Family Planning	25
Spermicides	26

\* From *Contraceptive Technology*, 17<sup>th</sup> Revised Edition (1998)

\*\* Based on **typical use** which takes into account that people are NOT perfect users (condoms break and a woman may forget to take a pill).

\*\*\* Applies to women who have not had a child.

## Summary

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### Needs of Postpartum Woman

The new mother should be encouraged to:

- replace the nutrients lost during pregnancy and delivery,
  - return to a healthy weight,
  - eat a healthy diet,
  - see her doctor for the postpartum medical visit, and
  - consider family planning.
- 

### Nutrition Recommendations

Postpartum women should:

- Eat a wide variety of foods with high nutrient density.
  - Eat the recommended servings from each food group using the *Food Guide Pyramid* as a guide for family meal selection and preparation.
  - Use foods and recipes that require little or no preparation.
  - Take in plenty of fluids
  - Avoid fad weight reduction diets, harmful substances, and excessive intake of fat, salt, caffeine, sugar, and artificial sweeteners.
- 

### Need May Vary

The number of servings from each of the food groups recommended for a postpartum woman may differ slightly depending on the woman's:

- age,
  - body size,
  - activity level (calories),
  - weight before pregnancy,
  - weight gained during pregnancy, and
  - breastfeeding status.
- 

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## Summary (continued)

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**Common Problems**

Common problems and concerns of postpartum women include:

- anemia,
  - constipation,
  - depression,
  - discomfort,
  - fatigue,
  - getting in shape, and
  - hemorrhoids.
- 

**Indicators of Nutritional Need**

There are many indicators of nutritional need that make a postpartum woman eligible for WIC. These indicators may depend on whether she is a breastfeeding or non-breastfeeding woman. They include anthropometric, biochemical, clinical, and dietary indicators.

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**Family Planning**

Family planning is planning how many children to have and when to have them.

Family planning methods include:

- abstinence,
  - birth control pill,
  - cervical cap,
  - Depo-Provera,
  - diaphragm,
  - female condom,
  - intrauterine device,
  - latex condom,
  - Lunelle,
  - mini pill,
  - natural family planning,
  - spermicides, and
  - sterilization.
-

## Glossary

abstinence- Abstinence is choosing not to have sexual intercourse.

anemia- Anemia is a condition in which the blood is low in iron.

anthropometric indicator- An anthropometric indicator is information about a person's body measurements such as height and weight.

biochemical indicator- A biochemical indicator is information about a person's blood or urine such as hemoglobin (Hgb), hematocrit (Hct), blood sugar, and blood lead levels.

birth control pill- The birth control pill is a prescription pill, taken daily, that prevents the ovaries from releasing eggs.

case study- A case study is a description of a person or situation that is studied to decide on the best plan of action.

cervical cap- A cervical cap is a soft rubber cup placed over the cervix that prevents sperm from entering the uterus.

Cesarean section- A cesarean section is the cutting of the walls of the abdomen and uterus for delivery.

clinical indicator- A clinical indicator is information about a person's health history and present medical conditions.

constipation- Constipation is bowel movements that are difficult or less frequent than usual.

Depo-Provera- Depo-Provera is a synthetic hormone, usually injected into the upper arm or buttocks, that prevents ovulation.

diaphragm- A diaphragm is a dome-shaped latex cap that must be coated with spermicide and inserted in the vagina to cover the cervix before intercourse.

dietary indicator- A dietary indicator is information about a person's eating behaviors.

family planning- Family planning is planning how many children to have and when to have children.

## Glossary (continued)

female condom- A female condom is a polyurethane (plastic) pouch with a flexible ring at both ends that is inserted into the vagina and placed over the cervix to prevent semen from entering the uterus.

Food Guide Pyramid - The *Food Guide Pyramid* is a food guide, in picture form, that shows what types and amounts of foods we need to eat each day to stay healthy.

hemorrhoids- Hemorrhoids are painful dilated veins near the rectal area of the body.

intrauterine device (IUD)- An intrauterine device is a small plastic device, that contains copper or a natural hormone, that is inserted into the uterus to prevent conception.

latex condom- A latex condom is a thin latex sheath worn over the penis during intercourse to prevent semen from entering the vagina.

Lunelle- Lunelle is a monthly injection of hormones that keeps ovaries from releasing egg, prevents sperm from joining the egg, and prevents implantation of fertilized egg.

mini pill- The mini pill, taken daily, is a low-dose contraceptive pill containing progestin that prevents egg release and causes the uterus opening to thicken stopping sperm from reaching the egg.

natural family planning- Natural family planning (also called the fertility awareness method) is not having sexual intercourse during the fertile period of a woman's cycle.

postpartum- Postpartum is the period of time after birth or delivery.

postpartum depression- Postpartum depression (sometimes called "baby blues") is a feeling of sadness after delivery that may last for about 4 months.

role play- A role play is when 2 or more people act out a scene as though it was "real life". "Props" such as baby dolls or food models are not needed but may be helpful.

## Glossary (continued)

spermicides- Spermicides are chemicals, such as nonoxynol-9, that kill sperm and are available in suppository, foam, cream, gel, film, or tablet forms.

sterilization- Sterilization is the surgical procedure in which reproductive organs are altered to prevent reproduction.

tubal ligation- Tubal ligation is the surgical procedure in which the tubes that carry the woman's eggs are blocked.

vasectomy- Vasectomy is the surgical procedure in which the tubes that carry the man's sperm are cut.

## Progress Check

1. A postpartum woman will need to: (Put a check (✓) before all possible answers.)

- \_\_\_\_\_ replace nutrients lost during pregnancy and delivery
- \_\_\_\_\_ eat a healthy diet
- \_\_\_\_\_ send the newborn child's birth certificate to the Internal Revenue Service (IRS)
- \_\_\_\_\_ see her doctor for the postpartum medical visit
- \_\_\_\_\_ consider family planning

2. Fill in the food groups chart below. Write in the range of servings recommended for postpartum women, the specific number of Milk Products servings recommended for young adults under 24 years, and the number of Protein Foods servings recommended for breastfeeding women.

Food Group	Number of Servings		
	Range of Servings	Women < 24 years	Breastfeeding Women
Breads, Cereals & Grains			
Vegetables			
Fruits			
Milk Products			
Protein Foods			

## Progress Check (continued)

3. The number of servings recommended for a postpartum woman will depend on her: (Put a check (✓) before all possible answers.)

\_\_\_\_\_ breastfeeding status

\_\_\_\_\_ age

\_\_\_\_\_ weight gain during pregnancy

\_\_\_\_\_ income

\_\_\_\_\_ activity level

\_\_\_\_\_ food preferences

4. Mark the following as “TRUE” or “FALSE”.

\_\_\_\_\_ Vitamin C and protein are needed to help the woman heal after a Cesarean section.

\_\_\_\_\_ Regular exercise will help a woman lose the weight gained during pregnancy.

\_\_\_\_\_ Constipation is never a problem for women after delivery.

\_\_\_\_\_ Fasting is a healthy way for a postpartum woman to lose weight.

\_\_\_\_\_ Postpartum depression only affects women who have a history of mental health problems.

\_\_\_\_\_ “Nap when the baby naps” is good advice for the new mother.

\_\_\_\_\_ To help new mothers prevent fatigue, encourage them to keep housework simple (do only what is needed) and to NOT try to “do it all”.

\_\_\_\_\_ The loss of blood during delivery can cause anemia.



## Progress Check (continued)

5. Name 3 problems common to postpartum women.

6. Match the common postpartum problem to a possible solution.

<u><b>Problem</b></u>	<u><b>Solution</b></u>
_____ Anemia	A Sit in a warm bath or apply Witch Hazel.
_____ Constipation	B Eat foods high in iron and Vitamin C.
_____ Hemorrhoids	C Exercise regularly.
_____ Fatigue	D Increase the amount of fiber in the diet.
_____ Depression	E Nap when the baby naps.
_____ Getting in Shape	F Join a new mothers support group.

## Progress Check (continued)

7. Identify the following indicators of nutritional need for a postpartum woman. Write in “A” for anthropometric, “B” for biochemical, “C” for clinical, and “D” for dietary.

\_\_\_\_\_ recipient of abuse (emotionally, physically, or sexually abused within past 6 months)

\_\_\_\_\_ overweight

\_\_\_\_\_ severe dental problems

\_\_\_\_\_ low protein intake

\_\_\_\_\_ low hemoglobin/hematocrit (10-11.9 g/dl/30.0-35.6 %)

8. Name 3 reasons why a couple may wait a year or more between pregnancies.

## Progress Check (continued)

9. Match the family planning method to its description.

<u>Method</u>	<u>Description</u>
_____ Abstinence	A Surgical procedure (vasectomy or tubal ligation)
_____ Condoms	B Barrier that covers the cervix.
_____ Cervical Cap	C Not having sexual intercourse.
_____ Pill	D Male or female latex barriers that prevent sperm from entering.
_____ Fertility Awareness	E Oral contraceptive that prevents ovaries from releasing eggs.
_____ Sterilization	F Natural family planning method in which body is monitored

10. Rank from “1” to “5” the following family planning methods. (Rank the method with the lowest failure rate “1” and the method with the highest failure rate “5”).

- \_\_\_\_\_ latex condom
- \_\_\_\_\_ sterilization
- \_\_\_\_\_ birth control pill
- \_\_\_\_\_ spermicides
- \_\_\_\_\_ diaphragm

## **Learning Activities**

The following activities are included and are recommended for interactive learning:

- Learning Activity 1: Birth & Postpartum Experience
- Learning Activity 2: Discussion of Postpartum Issues
- Learning Activity 3: Observations
- Learning Activity 4: Case Studies
- Learning Activity 5: Role Plays

## Activity 1: Birth & Postpartum Experience

**Learning Objectives** After completing this activity the Nutrition Assistant will be able to:

- describe what a new mother may experience during and after the birth of her child.

**Instructions**

1. Arrange to talk to a friend or relative who has recently given birth. (If this person does not feel comfortable talking about her experience, or such a person is not available to you, ask your mentor or supervisor for a CD-ROM, pamphlet, book, or video that describes the postpartum period.)
2. Interview your friend or relative (or review the video, CD-ROM, and/or reading materials).
3. Answer the questions on the next page.
4. Discuss your findings with your mentor or supervisor.

**Activity 1: Birth & Postpartum Experience**

What was the birth experience like for you? Did you have a vaginal or a Cesarean delivery?

Did you have any complications?

- ☐ fetal distress?
- ☐ fetus in risky position?
- ☐ pregnancy-induced hypertension?
- ☐ prolonged labor?
- ☐ other complications? \_\_\_\_\_

What emotions did you have before, during, and after the delivery?

What were the first few weeks after delivery like for you?

- ☐ postpartum depression?
- ☐ fatigue?
- ☐ constipation?
- ☐ hemorrhoids?
- ☐ discomfort?
- ☐ other? \_\_\_\_\_

## Activity 2: Discussion of Postpartum Issues

**Learning Objectives** After completing this activity, the Nutrition Assistant will:

- be familiar with some of the postpartum issues in WIC.

**Instructions**

1. Have your supervisor or mentor arrange for you to spend about 1 hour with a WIC staff person.
2. Ask the staff person to discuss her/his experiences with postpartum issues at WIC.
3. Ask such questions as:
  - *What nutrition problems seem to be most common among the breastfeeding and non-breastfeeding postpartum participants you see?*
  - *What are some common indicators of nutritional need for postpartum women?*
  - *What are some difficulties you have had in assessing a postpartum woman's nutritional status?*
  - *What suggestions do you have that would help a new staff person be ready to address the needs of postpartum women?*
4. Write down your notes on the next page.
5. When you are finished, discuss your findings with your mentor or supervisor.

## Activity 2: Discussion of Postpartum Issues

**Notes:**



## Activity 3: Observations

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**Learning Objectives** After completing this activity, the Nutrition Assistant will be able to explain how to:

- interview a postpartum woman,
- assess a postpartum woman's nutritional status,
- prioritize needs, and
- provide individual education.

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**Instructions**

1. Have your mentor or supervisor arrange for you to observe several individual nutrition education sessions with postpartum women.
2. Observe the staff person as s/he:
  - assesses the woman's needs/problems,
  - prioritizes these needs/problems, and
  - provides individual education.

Make sure to observe how staff:

- handle participants that need different levels of intervention (Levels 1-4) and
- promote breastfeeding.

3. Write down your notes on the next page.
  4. Discuss your observations with your mentor or supervisor.
-

### Activity 3: Observations

**Notes:**

## Activity 4: Case Studies

**Learning Objectives** After completing this activity, the Nutrition Assistant will be able to:

- assess a postpartum woman's anthropometric, biochemical, clinical, and dietary status.

**Instructions**

1. Read each of the 5 case studies on the following pages.
2. Obtain the following for the case studies:
  - pre-pregnancy weight for height table,
  - BMI chart, and
  - ISIS terminal for simulations (if available).
3. Using the pre-pregnancy weight for height table or a BMI chart, assess the woman's weight. Is her weight:
  - under,
  - over, or
  - normal?
4. Identify the woman's biochemical, clinical, and dietary status.
5. Identify any referrals that would be made.
6. Fill out the form following each case study.
7. When you are finished, discuss your responses with your supervisor or mentor.

## Activity 4: Case Studies

### Case Study 1:

Hannah is 23 years old. The following information is available about her:

- Height is 5 feet, 1 inch.
- Weight is 150 pounds.
- She had a C-section when delivering her son.
- She breastfeeds her 2-month old son.
- Hematocrit is 32.0%.
- Smokes 6-10 cigarettes/day.
- 24-hour recall shows that she eats a diet low in:
  - fruits and vegetables, and
  - protein.

### **Assessment:**

Weight: ☐ normal ☐ overweight ☐ underweight

What are her **anthropometric** risks?

What are her **biochemical** risks?

What are her **clinical** risks?

What are her **dietary** risks?

### **Referrals:**

## Activity 4: Case Studies

### Case Study 2:

Elena is 16 years old. The following information is available about her:

- Height is 5 feet, 8 inches.
- Weight is 166 pounds.
- Hematocrit is 37%.
- Her infant daughter died at 1 week of Sudden Infant Death Syndrome (SIDS).
- 24-hour recall shows that she rarely eats Vitamin C-rich foods.

### **Assessment:**

Weight: ☐ normal ☐ overweight ☐ underweight

What are her **anthropometric** risks?

What are her **biochemical** risks?

What are her **clinical** risks?

What are her **dietary** risks?

### **Referrals:**

## Activity 4: Case Studies

### Case Study 3:

HuaMei is 28 years old. The following information is available about her:

- Height is 5 feet, 4 inches.
- Weight is 122 pounds.
- Hematocrit is 35%.
- She miscarried at 15 weeks.
- 24-hour recall shows that she drinks only ½ cup of milk/day and no other milk products.

### Assessment:

Weight: ☐ normal ☐ overweight ☐ underweight

What are her **anthropometric** risks?

What are her **biochemical** risks?

What are her **clinical** risks?

What are her **dietary** risks?

### Referrals:

## Activity 4: Case Studies

### Case Study 4:

Gloria is 30 years old. The following information is available about her:

- Height is 5 feet, 3 inches.
- Weight is 163 pounds.
- Hematocrit is 30.9%.
- She breastfeeds her 3-month old son.
- She lives in a motel.
- She is not taking any iron supplements although she has been anemic for over a year.
- 24-hour recall shows that she has a diet low in protein.

### Assessment:

Weight: ☐ normal ☐ overweight ☐ underweight

What are her **anthropometric** risks?

What are her **biochemical** risks?

What are her **clinical** risks?

What are her **dietary** risks?

### Referrals:

## Activity 4: Case Studies

### Case Study 5:

Jamilla is 18 years old. The following information is available about her:

- Height is 5 feet, 3 inches.
- Weight is 180 pounds.
- Hemoglobin is 10.8 gm/dl.
- She does not breastfeed her 5-month old son.
- She also has an 18-month old daughter.
- 24-hour recall shows that she:
  - rarely eats fruits or vegetables and
  - almost “lives on” nachos, pizza and sodas.

### Assessment:

Weight: ☐ normal ☐ overweight ☐ underweight

What are her **anthropometric** risks?

What are her **biochemical** risks?

What are her **clinical** risks?

What are her **dietary** risks?

### Referrals:



## Activity 5: Role Plays

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**Learning Objectives** After completing this activity the Nutrition Assistant will be able to:

- interview a postpartum woman,
- assess her nutritional status,
- prioritize her needs, and
- provide individual education.

---

**Background** A role play is a scenario in which 2 or more people act out a scene as though it was “real life”. Props are not needed but may be helpful.

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**Instructions**

1. Ask your mentor, supervisor, or a co-worker to role play any 3 of the 5 roles (A-E) described on the following page.
2. Using the information you have learned about postpartum nutrition, act out the role of a WIC Nutrition Assistant in a session with each of these 3 postpartum women. **Make sure to promote breastfeeding where applicable.**
3. Mentor/Supervisor/Co-Worker: Using the role plays as your guide, act out the role of the participant. Try to be as realistic as possible.
4. After each session, ask your co-worker to tell you what s/he noticed. Make sure to ask for your strengths as well as weaknesses.

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## Activity 5: Role Plays

### 5 Participants

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**Role Play A** Cathy Douglas is 22 years old. She breastfeeds her 5-week old son whose birth weight was 10 lbs. She is 5 feet tall and weighs 110 lbs. Her hematocrit is 31%. She also has a 13-month old, 2-year old, and 3-year old. She says, “I only wanted 2 children!” Her 24-hour recall shows she eats very few fruits and vegetables.

---

**Role Play B** Alicia Garcia is 17 years old. She breastfed her newborn son for 1 month and then stopped. She is 5 feet, 5 inches tall and weighs 162 pounds. Her hemoglobin is 10.2 gm/dl. She had a C-section. Her 24-hour recall shows she eats very few protein foods.

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**Role Play C** MeiLi Chu is 31 years old. She breastfeeds her newborn daughter. She is 5 feet, 4 inches tall and weighs 112 pounds. Her hemoglobin is 12.8 gm/dl. Her 24-hour recall shows she eats a diet low in milk products.

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**Role Play D** Selena Juarez is 26 years old. She breastfeeds her newborn twins. She is 5 feet tall and weighs 180 pounds. Her hemoglobin is 11.2 gm/dl. Her 24-hour recall shows she eats a diet low in protein and eats few iron-rich foods.

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**Role Play E** Karen Johnstone is 19 years old. She does not breastfeed her 3 month-old son. She is 6 feet tall and weighs 170 pounds. Her hemoglobin is 11.8 gm/dl. She currently lives in a battered women’s shelter. Her 24-hour recall shows she eats a high fat diet.

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## Progress Check Answers

1. A postpartum woman will need to: (Put a check (✓) before all possible answers.)

- ☒ replace nutrients lost during pregnancy and delivery
- ☒ eat a healthy diet
- ☐ send the newborn child's birth certificate to the Internal Revenue Service (IRS)
- ☒ see her doctor for the postpartum medical visit
- ☒ consider family planning

2. Fill in the food groups chart below. Write in the range of servings recommended for postpartum women, the specific number of Milk Products servings recommended for young adults under 24 years, and the number of Protein Foods servings recommended for breastfeeding women.

Food Group	Number of Servings		
	Range of Servings	Women < 24 years	Breastfeeding Women
Breads, Cereals & Grains	<b>6-11</b>		
Vegetables	<b>3-5</b>		
Fruits	<b>2-4</b>		
Milk Products	<b>3-4</b>	<b>4</b>	
Protein Foods	<b>2-3</b>		<b>3</b>

## Progress Check Answers (continued)

3. The number of servings recommended for a postpartum woman will depend on her: (Put a check (✓) before all possible answers.)

☒ breastfeeding status  
☒ age  
☒ weight gain during pregnancy  
☐ income  
☒ activity level  
☐ food preferences

4. Mark the following as “TRUE” or “FALSE”.

**TRUE** Vitamin C and protein are needed to help the woman heal after a Cesarean section.

**TRUE** Regular exercise will help a woman lose the weight gained during pregnancy.

**FALSE** Constipation is never a problem for women after delivery.

**FALSE** Fasting is a healthy way for a postpartum woman to lose weight.

**FALSE** Postpartum depression only affects women who have a history of mental health problems.

**TRUE** “Nap when the baby naps” is good advice for the new mother.

**TRUE** To help new mothers prevent fatigue, encourage them to keep housework simple (do only what is needed) and to NOT try to “do it all”.

**TRUE** The loss of blood during delivery can cause anemia.

## Progress Check Answers (continued)

5. Name 3 problems common to postpartum women.

***Any 3 of the following responses are correct:***

- ***anemia,***
- ***constipation,***
- ***depression,***
- ***discomfort,***
- ***fatigue,***
- ***getting in shape, and***
- ***hemorrhoids.***

6. Match the common postpartum problem to a possible solution.

<b><u>Problem</u></b>	<b><u>Solution</u></b>
<b><u>B</u></b> Anemia	A Sit in a warm bath or apply Witch Hazel.
<b><u>D</u></b> Constipation	B Eat foods high in iron and Vitamin C.
<b><u>A</u></b> Hemorrhoids	C Exercise regularly.
<b><u>E</u></b> Fatigue	D Increase the amount of fiber in the diet.
<b><u>F</u></b> Depression	E Nap when the baby naps.
<b><u>C</u></b> Getting in Shape	F Join a new mothers support group.

## Progress Check Answers (continued)

7. Identify the following indicators of nutritional need for a postpartum woman. Write in “A” for anthropometric, “B” for biochemical, “C” for clinical, and “D” for dietary.

  **C**        recipient of abuse (emotionally, physically, or sexually abused within past 6 months)

  **A**        overweight

  **C**        severe dental problems

  **D**        low protein intake

  **B**        low hemoglobin/hematocrit (10-11.9 g/dl/30.0-35.6 %)

8. Name 3 reasons why a couple may wait a year or more between pregnancies.

***Any 3 of the following responses are correct:***

- ***Gives each child time to spend with her/his mother.***
- ***Allows family time to save some money for the next child.***
- ***Gives mother time to replace nutrients her body used during pregnancy.***
- ***Helps the family adjust to the new family member.***
- ***Helps lower the risk of low birth weight and premature infants.***

## Progress Check Answers (continued)

9. Match the family planning method to its description.

<u><b>Method</b></u>	<u><b>Description</b></u>
<u><b>C</b></u> Abstinence	A Surgical procedure (vasectomy or tubal ligation)
<u><b>D</b></u> Condoms	B Barrier that covers the cervix.
<u><b>B</b></u> Cervical Cap	C Not having sexual intercourse.
<u><b>E</b></u> Pill	D Male or female latex barriers that prevent sperm from entering.
<u><b>F</b></u> Fertility Awareness	E Oral contraceptive that prevents ovaries from releasing eggs.
<u><b>A</b></u> Sterilization	F Natural family planning method in which body is monitored.

10. Rank from “1” to “5” the following family planning methods. (Rank the method with the lowest failure rate “1” and the method with the highest failure rate “5”.)

- 3** latex condom
- 1** sterilization
- 2** birth control pill
- 5** spermicides
- 4** diaphragm